



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

PATENT
Atty. Dkt. AMAT/5799/TSG/ALD/BG

In re Application of:
Wang, et al.

Serial No.: 10/084,767

Confirmation No.: 3478

Filed: February 26, 2002

For: Cyclical Deposition of
Tungsten Nitride for Metal
Oxide Gate Electrode

MAIL STOP DD
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

The Applicants, and the Attorney who signs below on the basis of the information supplied by the inventor and the information in his file, submit herewith patents, publications, or other information of which they are aware, which may be material to the examination of this application and in respect of which there may be a duty to disclose in accordance with 37 CFR § 1.56.

While the information submitted in this Supplemental Information Disclosure Statement may be material pursuant to 37 CFR § 1.56, it is not intended to constitute an admission that any patent, publication, or other information referred to therein is prior art for this invention unless specifically designated as such.

In accordance with 37 CFR § 1.97, this Supplemental Information Disclosure Statement is not to be construed as a representation that a search has been made or that no other possibly material information as defined under 37 CFR § 1.56(a) exists.

Group Art Unit: 1762
Examiner: Unknown

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GROUP 1700
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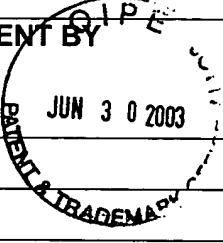
The patents and/or publications submitted herewith are set forth on the attached Form PTO-1449.

If the sum of \$180.00 is due under 37 CFR § 1.17(p) pursuant to § 1.97, the Commissioner is hereby authorized to charge this fee, and any other fee necessary to make this submission timely, to the Deposit Account No. 20-0782/AMAT5799/BTP.

Respectfully submitted,



B. Todd Patterson
Registration No. 37,906
MOSER, PATTERSON & SHERIDAN, L.L.P.
3040 Post Oak Blvd., Suite 1500
Houston, TX 77056
Telephone: (713) 623-4844
Facsimile: (713) 623-4846
Attorney for Applicant(s)

U.S. Department of Commerce, Patent and Trademark Office (PTO Form 1449 modified)					Docket No. AMAT/5799/TSG/ALD /BG	Serial No. 10/084,767		
INFORMATION DISCLOSURE STATEMENT BY APPLICANT					Applicant Wang, et al.	Confirmation No.: 3478		
(Use several sheets if necessary)					Filing Date February 26, 2002	Group 1762		
  U.S. Patent Documents								
*Examiner Initial		Document Number	Issue Date	Applicant(s) Name	Class	Subclass	Filing Date If Appropriate	
	A1	6,534,395	03/18/02	Werkhoven, et al.	438	627	03/06/01	
	A2	6,511,539	01/28/03	Raaijmakers	117	102	09/08/99	
	A3	6,482,740	11/19/02	Soininen, et al.	438	686	05/15/01	
	A4	6,482,733	11/19/02	Raaijmakers, et al.	438	633	04/26/01	
	A5	6,482,262	11/19/02	Elers, et al.	117	84	10/13/00	
	A6	6,475,910	11/05/02	Sneh	438	685	09/22/00	
	A7	6,475,276	11/05/02	Elers, et al.	117	84	10/13/00	
	A8	6,468,924	10/22/02	Lee, et al.	438	763	05/31/01	
	A9	6,451,695	09/17/02	Sneh	438	685	12/22/00	
	A10	6,447,933	09/10/02	Wang, et al.	428	635	04/30/01	
	A11	6,428,859	08/06/02	Chiang, et al.	427	457	03/19/01	
	A12	6,423,619	07/23/02	Grant, et al.	438	589	11/30/01	
	A13	6,420,189	07/16/02	Lopatin	438	2	04/27/01	
Foreign Patent Documents								
*Examiner Initial		Document Number	Date	Country	Class	Subclass	Translation	
							YES	NO
	B1	02/067319	08/29/00	WO	H01L	21/768	<input type="checkbox"/>	<input type="checkbox"/>
	B2	02/45167	06/06/02	WO	H01L	27/00	<input type="checkbox"/>	<input type="checkbox"/>
	B3	01/17692	03/15/01	WO	B05C	11/00	<input type="checkbox"/>	<input type="checkbox"/>
OTHER ART								
*Examiner Initial		Including Author, Title, Date, Pertinent Pages, Etc.						
	C1	Yang, et al. "Atomic Layer Deposition of Tungsten Film from WF ₆ /B ₂ H ₆ : Nucleation Layer for Advanced Semiconductor Device," Conference Proceedings ULSI XVII (2002) Materials Research Society						
	C2							
	C3							
Examiner					Date Considered			
<p>*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with your communication to applicant.</p>								

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Examiner Unknown	JUL 02 2003 RECEIVED GROUP 1700		

U.S. Patent Documents

*Examiner Initial	Document Number	Issue Date	Applicant(s) Name	Class	Subclass	Filing Date If Appropriate
A1	6,416,822	07/09/02	Chiang, et al.	427	561	03/19/01
A2	6,399,491	06/04/02	Jeon, et al.	438	680	04/06/01
A3	6,391,803	05/21/02	Kim, et al.	428	787	06/20/01
A4	6,391,785	05/21/02	Satta, et al.	438	704	08/23/00
A5	6,372,598	04/16/02	Kang, et al.	438	366	06/16/99
A6	6,369,430	04/09/02	Adetutu, et al.	257	382	04/02/01
A7	6,368,954	04/09/02	Lopatin, et al.	438	627	07/28/00
A8	6,358,829	03/19/02	Yoon, et al.	438	597	09/16/99
A9	6,355,561	03/12/02	Sandhu, et al.	438	676	11/21/00
A10	6,342,277	01/29/02	Sherman	427	562	04/14/99
A11	6,333,260	12/25/01	Kwon	438	643	06/24/99
A12	6,284,646	09/04/01	Leem	438	629	08/19/98
A13	6,207,487	03/27/01	Kim, et al.	438	238	10/12/99

Foreign Patent Documents

*Examiner Initial	Document Number	Date	Country	Class	Subclass	Translation	
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B1	2001-111000	12/26/00	JP	H01L	29/00	<input type="checkbox"/>	<input type="checkbox"/>
B2	2000-178735	06/27/00	JP	C23C	16/08	<input type="checkbox"/>	<input type="checkbox"/>
B3	1,167,569	01/02/02	EP	C23C	16/455	<input type="checkbox"/>	<input type="checkbox"/>

OTHER ART

*Examiner Initial	Including Author, Title, Date, Pertinent Pages, Etc.
C1	
C2	
C3	

Examiner	Date Considered
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	Examiner Unknown	Document Number Unknown	Issue Date Unknown	Applicant(s) Name 118	Class 437	Subclass 192	Filing Date If Appropriate 07/21/93
U.S. Patent Documents							
*Examiner Initial		Document Number	Issue Date	Applicant(s) Name	Class	Subclass	Filing Date If Appropriate
	A1	5,306,666	04/26/94	Iuzmi	437	192	07/21/93
	A2	2003/0082296	05/01/03	Elers, et al.	427	96	09/12/02
	A3	2003/0072975	04/17/03	Shero, et al.	428	704	09/26/02
	A4	2003/0049942	03/13/03	Haukka, et al.	438	778	08/22/02
	A5	2003/0032281	02/13/03	Werkhoven, et al.	438	640	09/23/02
	A6	2003/0031807	02/13/03	Elers, et al.	427	569	09/17/02
	A7	2003/0013320	01/16/03	Kim, et al.	438	778	05/31/01
	A8	2002/0197402	12/26/02	Chiang, et al.	427	255.39	08/08/02
	A9	2002/0187631	12/12/02	Kim, et al.	438	637	12/05/01
	A10	2002/0187256	12/12/02	Elers, et al.	427	99	07/30/02
	A11	2002/0182320	12/05/02	Leskela, et al.	427	250	03/15/02
	A12	2002/0164423	11/07/02	Chiang, et al.	427	255.28	05/03/02
	A13	2002/0164421	11/07/02	Chiang, et al.	427	248.1	05/03/02
	A14	2002/0162506	11/07/02	Sneh, et al.	118	715	06/28/02
	A15	2002/0155722	10/24/02	Satta, et al.	438	704	04/15/02
	A16	2002/0146511	10/10/02	Chiang, et al.	427	248.1	10/24/01
	A17	2002/0144657	10/10/02	Chiang, et al.	118	723	10/03/01
	A18	2002/0144655	10/10/02	Chiang, et al.	118	715	10/24/01
	A19	2002/0121697	09/05/02	Marsh	257	751	04/30/02
	A20	2002/0117399	08/29/02	Chen, et al.	205	125	02/23/01
	A21	2002/0109168	08/15/02	Kim, et al.	257	295	01/30/02
	A22	2002/0106846	08/08/02	Seutter, et al.	438	200	02/02/01
	A23	2002/0105088	08/08/02	Yang, et al.	257	774	10/31/01
	A24	2002/0104481	08/08/02	Chiang, et al.	118	723 I	03/19/01
	A25	2002/0094689	07/18/02	Park	438	694	03/07/02
Examiner					Date Considered		
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U.S. Patent Documents								
*Examiner Initial		Document Number	Issue Date	Applicant(s) Name	Class	Subclass	Filing Date If Appropriate	
A1		2002/0090829	07/11/02	Sandhu, et al.	438	761	01/31/02	
A2		2002/0076837	06/20/02	Hujanen, et al.	438	3	11/28/01	
A3		2002/0076508	06/20/02	Chiang, et al.	427	569	12/19/01	
A4		2002/0076507	06/20/02	Chiang, et al.	427	569	10/24/01	
A5		2002/0076481	06/20/02	Chiang, et al.	427	8	10/24/01	
A6		2002/0073924	06/20/02	Chiang, et al.	118	723 R	10/24/01	
A7		2002/0068458	06/06/02	Chiang, et al.	438	694	11/26/01	
A8		2002/0061612	05/23/02	Sandhu, et al.	438	151	01/14/02	
A9		2002/0055235	05/09/02	Agarwal, et al.	438	430	10/29/01	
A10		2002/0052097	05/02/02	Park	438	507	05/03/01	
A11		2002/0048880	04/25/02	Lee	438	253	08/08/01	
A12		2002/0047151	04/25/02	Kim, et al.	257	301	07/12/01	
A13		2002/0037630	03/28/02	Agarwal, et al.	438	430	10/29/01	
A14		2002/0031618	03/14/02	Sherman	427	569	10/09/01	
A15		2002/0019121	02/14/02	Pyo	438	618	06/20/01	
A16		2002/0016084	02/07/02	Todd	438	791	04/26/01	
A17		2002/0007790	01/24/02	Park	118	715	05/03/01	
A18		2002/0004293	01/10/02	Soininen, et al.	438	584	05/15/01	
A19		2002/0000598	01/03/02	Kang, et al.	257	301	07/26/01	
A20		2001/0054769	12/27/01	Raijmakers, et al.	257	758	04/26/01	
A21		2001/0054730	12/27/01	Kim, et al.	257	301	05/23/01	
A22		2001/0029094	10/11/01	Mee-Young, et al.	438	597	09/16/99	
A23		2001/0028924	10/11/01	Sherman	427	255.28	05/24/01	
A24		2001/0024387	09/27/01	Raijmakers, et al.	265	200	02/22/01	
A25		2001/0009695	07/26/01	Saanila, et al.	427	255.39	01/18/01	
A26		2001/0002280	05/31/01	Sneh	427	255.28	12/22/00	
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